INTERNATIONAL MONETARY FUND AND THE WORLD BANK

Managing Public Debt: Formulating Strategies and Strengthening Institutional Capacity

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ACRONYMS

ADB Asian Development Bank AfDB African Development Bank

AFR African Department (Fund), African Region (Bank)

AFRITAC African Technical Assistance Center

AMF Arab Monetary Fund AT MTDS Analytical Tool

BEAC Bank of Central African States

BDM Banking and Debt Management Department (Bank)

CB Central Bank

COMSEC Commonwealth Secretariat

CEMAC Economic and Monetary Community of Central Africa

CEMLA Regional Association of Latin American and Caribbean Central Banks

CMAC Central American Monetary Council

DECDG Development Economics Data Group (Bank)
DeMPA Debt Management Performance Assessment

DMF Debt Management Facility

DMFAS Debt Management Financial and Analysis System (UNCTAD)

DRI Debt Relief International
DSA Debt Sustainability Analysis
DSF Debt Sustainability Framework
EAP East Asia and Pacific Region (Bank)
ECA Europe and Central Asia Region (Bank)

FAD Fiscal Affairs Department (Fund)

FRM Financial Resources Mobilization Department (Bank)

FSAP Financial Sector Assessment Program

GCMSM Global Capital Markets Securities Markets Department (Bank)

Gemloc Global Emerging Markets Local Currency Bond

GFSR Global Financial Stability Report

GN MTDS Guidance Note

HIPC Heavily Indebted Poor Countries

LAC Latin America and Caribbean Region (Bank)

LIC Low-Income Country

MCM Monetary and Capital Markets Department (Fund)

MDRI Multilateral Debt Relief Initiative

MEFMI Macroeconomic Institute for Financial Management

MIC Middle-Income Country MoF Ministry of Finance

MNA Middle East and North Africa Region (Bank)
MTDS Medium-term Debt Management Strategy

MTFF Medium-term Fiscal Framework

PDM Public Debt Management

PEFA Public Expenditure and Financial Accountability
PRMED Economic Policy and Debt Deptartment (Bank)

RTAC Regional Technical Assistance Center

SAR South Asia Region (SAR)

SPR Strategy, Policy and Review Department (Fund)

TA Technical Assistance

TAG DMF Technical Advisory Group

TTF Topical Trust Fund
UFR Use of Fund Resources

UNCTAD United Nations Conference on Trade and Development

WAIFEM West African Institute for Financial and Economic Management

I. Introduction

- 1. In May 2007, the IMF and World Bank Boards discussed the paper "Strengthening Debt Management Practices: Lessons from Country Experiences and Issues Going Forward". In those discussions, the Boards of both institutions endorsed a public debt management (PDM) work program that was particularly focused on strengthening frameworks and capacity in low-income countries (LICs). This comprised three main elements: (i) develop a toolkit to help LICs formulate an effective Medium-Term Debt Management Strategy (MTDS) and apply it in 4–6 countries a year; (ii) undertake debt management performance assessments; and (iii) continue the provision of debt management and domestic market development technical assistance (TA) and advisory services to middle-income countries (MICs). This paper is a response to the Boards' request for an update on the development and implementation of that work program.
- 2. The earlier paper noted the importance of improving debt management capacity in LICs, particularly where debt relief had created significant borrowing space. This was presented in a context where countries needed access to significant additional funding if growth was to accelerate and the Millenium Development Goals were to be met. Directors recognized that in many instances PDM capacity was still weak, especially in the area of formulating an effective MTDS that adequately evaluates the costs and risks of new borrowing. This situation raised the concern that poor borrowing choices would contribute to the re-accumulation of unsustainable debt, particularly in light of the new borrowing opportunities that were emerging. Since then, rapid changes in the macroeconomic and market environment have led to new financing and debt related pressure points that further underscore the need for well-functioning PDM frameworks and robust debt management strategies.
- 3. This paper reports on progress in supporting efforts to strengthen the PDM framework in developing economies, with a special focus on the needs of LICs.² It highlights lessons learned in the development and implementation of the toolkits designed for this purpose, and proposes a way forward for the Bank and the Fund to extend and deepen the program. The paper will also report on ongoing PDM work in MICs.

¹ While the funding needs are large, many LICs indicate that the availability of concessional financing has not grown in line with demands. For example, as discussed at the IMF-World Bank Annual Meetings 2008 African Governors Roundtable on Emerging Financing and Debt Related Challenges.

² Within the Fund, the paper has been prepared by staff of the Sovereign Asset and Liability Management Division, Monetary and Capital Markets Department. Within the Bank, the paper has been prepared by staff of Economic Policy and Debt Department, Poverty Reduction and Economic Management, and Banking and Debt Management Department, Treasury.

II. THE FINANCIAL CRISIS: IMPLICATIONS FOR DEBT MANAGERS

- 4. The current conjuncture is particularly challenging for debt managers. The volatile and changing outlook for debt markets, creditors, and donors highlights the importance of developing and maintaining a diverse range of financing sources. In particular, the external nature of the shock highlights the importance of a resilient source of domestic savings to absorb shortfalls in external financing. Further, the higher volatility of interest rates, exchange rates, and debt flows exert additional pressure on debt managers to properly assess—and to the extent possible mitigate—the risks.
- 5. **Fiscal pressures have increased across the board, leading to increased financing needs at a time when conditions in financial markets are severely constrained**. Economic activity is slowing and widespread credit contraction is exacerbating the slowdown. In countries where fiscal space exists, compensating for this economic slowdown through expansionary fiscal policies, and/or providing support for the domestic financial system, will require additional government borrowing.
- 6. **Some MICs are better placed to meet these challenges as a result of past efforts to reduce vulnerabilities in their debt portfolio.** Indeed, several established borrowers have been able to successfully tap international capital markets this year (including Brazil, Colombia, Poland, and Slovenia), relieving some pressures on domestic markets, and helping secure the benefits of past gains in domestic market development. Similarly, the cash buffers that some have built up (e.g., Brazil) enabled debt managers to modify their issuance plans in 2008, in some instances even temporarily suspending issuance, and provide some scope to cover their 2009 financing needs. This illustrates the potential benefits that can accrue to countries through a sustained program to strengthen PDM and formulate robust debt management strategies closely coordinated with prudent macroeconomic policies.³
- 7. Among the LICs, too, the financial crisis and global recession will also increase financing needs. The crisis is being transmitted to LICs primarily through real sector channels. Real export volumes of primary commodities will be hit hard as the global recession continues, adversely affecting government revenues in many LICs. Moreover, the massive decline in commodity prices over the last six months and their weak prospects in 2009 are likely to further contribute to additional pressure in their export sectors and deterioration of fiscal revenues. Remittances, a major source of external revenue in many

³ Indeed, improvements in PDM frameworks, strengthening of debt management strategies and resultant reduction in portfolio vulnerabilities have contributed to rating upgrades in several cases, including the recent upgrades of Brazil and Uruguay.

⁴ See "The Implications of the Global Financial Crisis for Low-Income Countries," International Monetary Fund, forthcoming and "Weathering the Storm: Economic Policy Responses to the Financial Crises," World Bank, November 2008.

LICs, are also expected to contract in 2009, while FDI flows are expected to fall. Other financial inflows, including bilateral aid, are also subject to downside risks. Domestic banks may be hit by second-round effects as the economic downturn increases the number of borrowers unable to service their loans. On the fiscal front, less buoyant tax revenues, combined with pressing expenditure needs, are likely to open up higher financing gaps in many LICs.

- 8. **LICs' options to fill these emerging financing gaps are constrained.** Some LICs, which have created fiscal space in recent years through prudent fiscal policies, or built up financial cushions by saving part of their booming revenues from commodity exports, may have scope for fiscal stimulus. In others, this scope is limited by debt sustainability and financing constraints, unless donors come forward with provision of additional support at concessional terms.
- 9. This major challenge will require a re-evaluation of the existing debt management strategies in all countries, especially LICs. The financing options that a number of LICs had available to them last year may now have very different cost and risk characteristics. Moreover, the scope to substitute external sources with domestic savings is also limited, particularly where domestic debt markets are underdeveloped and liquidity is constrained. This context highlights the urgent need to develop or put in place a robust PDM framework in LICs that helps promote long-term debt sustainability, and can adapt to a changing market environment.⁵

III. WORK PROGRAM LINKAGES

10. **Staffs have completed the development of a suite of tools that can be used to help strengthen PDM frameworks in LICs.** It is an integrated architecture, yet flexible enough so that each individual component can be used in isolation to respond to unique country demands. The architecture builds on the *Guidelines for Public Debt Management* (IMF and World Bank, 2001, revised 2003) and the significant experience of Fund and Bank staff on debt issues, and in providing PDM capacity building and TA in client and member countries.

11. The three main components of the work program architecture are:

• *The MTDS toolkit*. This aims to provide technical and operational guidance on the process for developing a *plan* that the government intends to implement over the medium-term⁶ in order to achieve a *desired composition of the government debt portfolio*. It also captures

⁵ For example, in the current context, applying the MTDS framework will help identify, and quantify, the key risks involved in using whatever financing options are available, allowing them to be managed more effectively.

⁶ The medium-term is typically defined as 3–5 years. This mitigates the risk that short-term expediency will dominate the choice of strategy.

- the government's preferences with regard to the *cost-risk trade-off*, and is consistent with long-term debt sustainability.
- The Debt Management Performance Assessment (DeMPA) toolkit, which assesses the strengths and weaknesses in the institutional arrangements supporting PDM operations in a country.
- *Targeted capacity building and TA*, that can be applied when a country requests support in a specific area of PDM (e.g., drafting a legal framework to underpin borrowings and guarantees).
- 12. This program has been developed to address the need for PDM reforms along both policy and institutional lines. Institutional reforms should establish a consolidated and coordinated operational approach, while policy reforms should seek to determine objectives, instruments and targets that support the separation of PDM from fiscal and monetary policies. Central to these reforms is the critical role of risk management in the formulation of a debt management strategy consistent with fiscal and debt sustainability. The toolkits complement each other, as well as the analysis provided by the debt sustainability framework (DSF) for LICs, in supporting overall PDM reform (see Box 1). Overall the work program complements other related capacity building and TA efforts, including financial sector TA related to the Financial Sector Assesment Program (FSAP) or other domestic debt market development initiatives (e.g., through the Gemloc Advisory Service Program). The specifics of both the MTDS and DeMPA toolkits are discussed in more detail below.

IV. MEDIUM-TERM DEBT MANAGEMENT STRATEGY

A. Developing the Framework

13. A joint Bank-Fund working group undertook the task of developing a framework to guide the formulation of an effective MTDS. A key element of this work was the development of operational guidance so that countries could meet their financing needs at low cost, subject to a prudent degree of risk, and consistent with maintaining debt sustainability. The framework was also intended to take due account of the specific macro challenges facing LICs and countries' specific degree of market development and access. In line with Directors' suggestion ("Strengthening Debt Management Practices: Lessons from Country Experiences and Issues Going Forward"), the framework has a strong focus on identifying and managing the risk exposure embedded in the debt portfolio, and enabling effective risk monitoring. It also helps to underscore the importance of domestic debt market

⁷ See for example discussion in the IMF and World Bank, 2001, "Guidelines for Public Debt Management", or Wheeler, Graeme, 2004, "Sound Practice in Government Debt Management", World Bank.

⁸ The working group comprised Bank representatives from PRMED, BDM, and FRM, and Fund representatives from MCM, AFR, FAD, and SPR.

Box 1. DeMPA, MTDS and the DSF: The Linkages

DeMPA, MTDS and DSF are all frameworks that address debt issues. DeMPA and MTDS are targeted debt management frameworks focused on how the composition of debt is managed, while the DSF focuses on the long-term sustainability of debt, which is influenced by both its level and composition. While each has its own particular focus, the approaches complement each other. In particular, the level and composition of debt are intrinsically inter-linked—changes in the composition will impact the servicing of the debt, potentially adding to the level, while the level of debt will influence the terms and availability of new borrowing, and consequently the feasible composition of the debt. These interdependencies imply that a PDM framework must be consistent with a fiscal framework that ensures public debt sustainability.

One way to concretely consider the specific linkages between the three approaches is to define sovereign debt management as the *process of establishing and executing a strategy for managing the government's debt* in order to raise the required amount of funding, achieve its risk and cost objectives, and to meet any other sovereign debt management goals the government may have set, such as developing and maintaining an efficient market for government securities.^{1/}

In this context, the **DeMPA** assesses the effectiveness of the *processes* involved in sovereign debt management, highlighting their strengths and weaknesses. That is, it assesses all functions of debt management that will ultimately have an impact on the government's ability to effectively formulate and implement a credible MTDS. In this regard, DeMPA assessments can help support debt sustainability over the long term by highlighting areas in need of improvement so that a country achieves sound debt management practices.

The **MTDS** provides a framework for formulating and implementing a debt management strategy that raises the required amount of funding while achieving the government's risk and cost objectives, consistent with maintaining debt sustainability. It is primarily focused on *determining the appropriate composition* of the debt portfolio, taking into account the macroeconomic and market environment, and related vulnerabilities. It determines the government's plans to achieve its desired portfolio composition over the medium term (e.g., 3–5 years).

Finally, the **DSF** helps determine the *level and terms of borrowing that can be sustained*. Long-term debt sustainability in a country depends on multiple factors such as real GDP growth, sound fiscal policy, and a consistent macroeconomic policy mix, including prudent debt management. Overall, its primary objective is to gauge if the *level* and terms of current and expected future borrowing, associated with a well-defined medium-term macroeconomic framework, may lead to future debt servicing difficulties over the long term.

^{1/} From the "Guidelines for Public Debt Management".

development⁹ by highlighting the potential benefits of developing a diverse range of financing sources. The process of designing and implementing an effective MTDS is described in a guidance note (GN).¹⁰ In addition to the GN, a spreadsheet-based analytical tool (AT) has also been developed to help support the process of decision-making when formulating a strategy.¹¹

- 14. The framework has been shared with, and feedback obtained from, both TA partners and other debt management experts in the field. Staffs have also used the opportunities provided by various international debt management for to outline the framework for a wide range of debt managers, and donors. That feedback, in addition to comments from country authorities where the framework has been applied, has been incorporated in the development of the toolkit. 13
- 15. **Overall the framework is flexible in its application.** For example, even where borrowing choices remain limited, embedding such a systematic approach to decision-making can help strengthen the debt management function, enhance analytical capacity and help reduce operational risk. It also emphasizes the need for debt managers to assess, and take into account, the potential impact of their actions, and other developments, on the potential availability of different sources of financing. ¹⁴ The following two sections set out the key features of the GN and the AT.

B. The Guidance Note

16. The GN provides practical guidance on the process of developing an effective MTDS, describing each step involved in detail (see Box 2). A series of detailed appendices complements the description of the process. The GN also touches on related issues such as dissemination, monitoring and implementation of the MTDS, providing for example, a template for public documentation of the strategy. While the GN is intended for the

¹¹ A user manual for the AT is being prepared; a preliminary version is available on request. This will be completed and posted on the Fund and Bank websites, along with the AT and the GN, by May 2009.

⁹ The delivery of this work, and its contribution to domestic debt market development, has been recognized in the G–8 Action Plan for Developing Local Bond Markets in Emerging Market Economies and Developing Countries.

¹⁰ The GN is attached in an accompanying volume.

¹² Such as COMSEC, CEMLA, Debt Relief International, MEFMI, Pole Dette, WAIFEM and UNCTAD. See Strengthening Debt Management Practices: Lessons from Country Experiences and Issues Going Forward, Annex IV for a description of the main debt management TA agencies.

¹³ As with the DSF, it is anticipated that the toolkit will be kept under review. The toolkit will be further refined as implementation of the framework becomes more widespread.

¹⁴ For example, the impact of issuing a sovereign bond on the international capital markets on future access to concessional borrowing (e.g., taking into account IDA's nonconcessional borrowing policy).

authorities responsible for debt management operations, it is also useful for a broader audience of monetary and fiscal policy makers.

Box 2. Steps in Determining an Effective MTDS

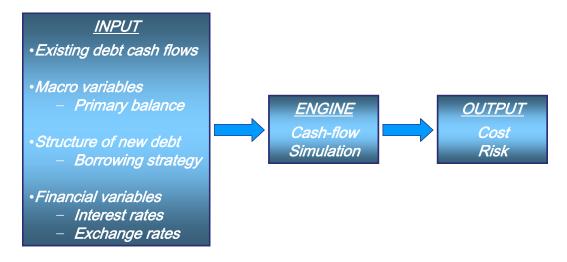
The key steps involved in determining an effective MTDS are:

- 1. Identify the objectives for public debt management and scope of the MTDS.
- Identify the current debt management strategy and analyze the cost and risk of the existing debt.
- 3. Identify and analyze potential funding sources, including cost and risk characteristics.
- 4. Identify baseline projections and risks in key policy areas—fiscal, monetary, external and market.
- 5. Review key longer-term structural factors.
- 6. Identify the cost-risk trade-offs, and assess and rank alternative strategies.
- 7. Review implications of candidate debt management strategies with fiscal and monetary policy authorities, and for market conditions.
- 8. Submit and secure agreement on the MTDS.
- 17. By going through the process set out in the GN, the cost-risk trade-off of different borrowing strategies is evaluated within a medium-term context. Setting clear medium-term strategic goals will help debt managers make informed choices and avoid poor decisions made solely on the basis of cost, or for the sake of short-term expediency. The process helps identify, monitor and manage key financial risks. It also explicitly requires coordination with fiscal and monetary management, helping identify the constraints that limit the debt manager's choices, as well as the steps to ease those constraints. Finally, by encouraging transparency, this approach can help facilitate the relationship with external investors, rating agencies and others in the financial markets, and consequently support domestic debt market development.

C. The Cost-Risk Analytic Tool

18. The purpose of the Analytical Tool (AT) is to provide quantitative analysis to guide the MTDS decision-making process. It has a spreadsheet-based structure developed on the basis of scenario-analysis models typically used by debt management offices, projecting cash flows as a function of: (i) existing debt; (ii) macroeconomic assumptions, e.g., primary balances; (iii) new borrowing strategies; and (iv) financial variables, including interest rates and exchange rates (see Figure 1).

Figure 1. The AT Tool



- 19. The AT facilitates the quantification of costs and risks for each strategy under consideration. By illustrating the consequences of following a particular strategy under various scenarios for macroeconomic and market variables, it gives insight into the key vulnerabilities embedded in the specific strategy under consideration. The standard output, generated by the AT, focuses on two specific cost measures: annual interest payment-to-GDP and the nominal stock of debt-to-GDP. The risk is measured in terms of the maximum increase in cost, given a particular macro or market scenario, relative to the baseline. However, the AT also calculates a number of other cost and risk indicators, allowing countries to focus on those measures most relevant for their needs, and outputs can be tailored as desired.
- 20. Furthermore, the AT enables the comparison of alternative strategies, by allowing their different cost-risk combinations to be mapped. For example, see the illustration in Appendix II. This mapping will highlight the point on the cost-risk trade-off where costs cannot be reduced further without incurring higher risks, and similarly where risk cannot be reduced without increasing costs. The ultimate choice of strategy will therefore depend on the authorities' tolerance for risk—a decision typically taken at the highest level. Additional factors, including macroeconomic constraints and domestic debt

¹⁵ The AT employs a deterministic rather than a stochastic framework for measuring risk. This need for a deterministic approach is largely driven by the severe data limitations in LICs. Consequently, it was decided that risk would be more reasonably captured by looking at the change in baseline costs resulting from the application of various stress tests.

¹⁶ Such as interest costs/revenues, debt service/exports, amortization profiles, average time to maturity, and share of variable rate debt. These indicators could be compared to the equivalent output from the LIC DSF to gauge the debt sustainability implications. The practical links between the MTDS framework and the DSF are discussed more fully in the GN.

market development objectives, may also affect the preferred strategy choice. It is worth noting that often the trade-off is not always straightforward. For example, using one indicator, one strategy may clearly dominate the rest; however, once the other indicator is assessed, the preferred strategy may be less clear. This clearly shows why determining the appropriate strategy requires significant judgment, and is not a purely formulaic exercise.

D. Preliminary Results from Early Application of the Framework

- 21. The MTDS toolkit was developed partly on the basis of experience gained in its application in five countries, namely Bangladesh, Ghana, Cameroon, Nicaragua, and Moldova. The countries were chosen on the basis of expressed demand, their regional diversity, diversity with respect to financing choices and degree of domestic debt market development. Moreover, they belong to a group of countries where the Bank or Fund had already been engaged in the provision of debt management TA.
- 22. The principal objective was to help countries build the capacity to systematically identify the trade-offs involved in determing a new, or modify an existing MTDS. Mission teams¹⁷ discussed the key elements of the toolkit with the authorities, demonstrating how a specific set of strategies might be assessed in practice, given macroeconomic and pricing assumptions. They also sensitized the authorities to the process of formulating an MTDS, so that, going forward, the authorities would be better able to integrate debt management and macroeconomic issues. This would facilitate a stronger and more active dialogue with Fund and Bank country teams, and the public in general. However, the work undertaken did not entail identifying a prescriptive or single strategy (see Appendix II).
- 23. This early country experience confirmed the benefits from the development of such a framework at the country level. As anticipated in "Strengthening Debt Management Practices: Lessons from Country Experiences and Issues Going Forward", key vulnerabilities in the macro-economic environment present significant challenges. Most countries were exposed to external shocks, a vulnerability that was aggravated by a dependency on aid flows. In addition, lack of financing flexibility, largely as a consequence of limitations in domestic financing sources, reduced countries capacity to absorb shocks, including volatility in aid flows, adding volatility to expenditures and growth. This exposure to external shocks, including the current crisis, implies a risk of exchange rate adjustment, a key source of risk to the debt portfolio.
- 24. **Countries typically had an informal debt management strategy in place.** While generally based on concepts of debt sustainability, overall, these strategies lacked a firm

¹⁷ Teams typical included a combination of Fund and Bank staff and a member from other debt management TA providers. UNCTAD joined the Bangladesh team, while COMSEC joined in Ghana. A debt management expert at the Central AFRITAC participated in Cameroon.

analytical underpinning. In addition, the treatment of the debt portfolio was not comprehensive, with external and domestic debt dealt with separately. Finally, in several cases, the authorities had a conflict between an objective of reducing the stock of domestic debt, while also developing the domestic debt market.

- 25. **The typical strategy was to maximize concessional debt.**¹⁸ Maintaining a strategy of maximizing concessional financing would continue to minimize debt servicing costs, fostering greater debt sustainability. However, it does result in significant exchange rate risk. Following that strategy also meant that domestic debt market development was neglected, and, in general, domestic debt had played the role of a fiscal anchor with respect to satisfying the conditions attached to various donor programs.
- 26. While reducing the exchange rate exposure of the total debt portfolio was desirable in most cases, the scope for a significant substitution of domestic for external debt was limited by the general shallowness of domestic markets. In addition, where capital accounts were open, and the authorities were committed to an exchange rate anchor, the short maturity of domestic debt implied an additional source of rollover risk. However, this risk was relatively small in those countries where domestic debt was low, and/or fiscal surpluses had been generated. In some instances, where the presence of nonresident investors had supported an extension of maturity in the domestic market, the associated rollover risk was mitigated by restricting their investments to longer tenors. Going forward, to contain risks to debt sustainability, such a strategy would need to be accompanied by appropriate macroeconomic policies to contain domestic interest rates.
- 27. This strategy of maximizing concessional debt has also constrained the scope for a medium-term expenditure framework to drive expenditure choices. This determination of borrowing choices, primarily on the basis of the availability of specific concessional loans, limited the analysis of the full range of available financing, both external and domestic. The adoption of the MTDS framework would allow country authorities to consider the scope for financing expenditures using a wider range of instruments, rather than solely constraining the choice to a specific source of concessional loans. That would facilitate an untying of aid, and would support efforts to develop more robust medium-term fiscal and budget frameworks, from which expenditure priorities can be determined independent of the financing. ¹⁹

¹⁸ This is in line with Boards' discussion of "Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief," November 2006, where Directors reiterated that concessional flows remain the most appropriate source of external finance for LICs. While such a strategy might not appear consistent with plans to develop the domestic debt market, it might be possible to pursue both objectives. In some cases, however, this could lead to reserves accumulation and/or overfinanced budgets.

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¹⁹ This would not preclude countries with limited capacity to obtain assistance in specifying, assessing, and implementing projects.

- 28. Taking a more strategic approach to determining financing choices will also necessitate more integration of debt management strategy formulation and broader macroeconomic management. In many of the countries, vulnerabilities to exchange rate and potential budget volatility suggested the need to take account of fiscal and foreign exchange reserves buffers in formulating an MTDS. For example, while tapping nonresident investors in local markets was a potential avenue for mobilizing foreign currency and possibly extending the maturity of domestic debt, some allowance for that should be taken into account when determining reserves adequacy.
- 29. The lack of a formal debt management strategy that takes a total portfolio perspective also appears to have had adverse institutional consequences, with borrowing decisions often made outside the debt management unit without explicit vetting. In addition, in most cases, effective implementation of an MTDS would require improvements in government cash management, and monetary operations and liquidity management.
- 30. Addressing the various institutional weaknesses identified in the application of the framework will need continued TA. For example, some countries lacked adequate debt databases and information systems, impeding their ability to formulate an MTDS. Where a DeMPA was applied alongside the MTDS framework, this provided the authorities with a thorough diagnostic to identify institutional weaknesses and priorities for reform.

V. DEBT MANAGEMENT PERFORMANCE ASSESSMENT (DEMPA)

A. The DeMPA Framework

- 31. Directors supported the proposal to complement the MTDS capacity building work with the application of the DeMPA framework. DeMPA provides a standard to measure performance by assessing the strengths and weaknesses in country PDM operations. This assessment can form the basis for the design of an actionable reform program, thereby helping harmonize donor support in this area. It also permits country authorities, international donors and creditors to monitor progress in strengthening PDM operations in a country over time.
- 32. **Development of the framework is complete.** The framework was developed under the auspices of the Bank's Debt Management Technical Working Group, ²⁰ and through a broad collaborative effort with country officials, TA providers, international standard setting agencies and related stakeholders. ²¹ As with the MTDS framework, development also

²¹ Inputs provided by the IMF; Debt Relief International (DRI); the DMFAS Programme of the United Nations Conference on Trade and Development (UNCTAD); the Debt Management Division of the Commonwealth Secretariat; the U.S. Department of the Treasury - Office of Technical Assistance; and international standard (continued)

²⁰ The members are from the Bank departments (PRMED, BDM, DECDG, and GCMSM), the regions (AFR, EAP, ECA, LAC, MNA, and SAR) and the IMF (MCM, FAD, and SPR).

benefited from experiences and feedback gained through field testing in Albania, Guyana, The Gambia, Malawi, and Nicaragua. Valuable comments received at seminars and outreach events were also incorporated.²²

33. **DeMPA is a comprehensive methodology for assessing PDM performance.** It covers all six core functions of PDM (see Box 3): (1) governance and strategy development; (2) coordination with macroeconomic policies; (3) borrowing and related financing activities; (4) cash flow forecasting and cash balance management; (5) operational risk management; and (6) debt records and reporting. Its scope is central government PDM and closely related functions such as issuance of loan guarantees, on-lending and cash flow forecasting and cash balance management. However, in line with international standards on debt reporting, the debt reporting indicator requires that the central government report both central government and total nonfinancial public sector debt and loan guarantees. It is modeled after the Public Expenditure and Financial Accountability (PEFA) indicators.

setting bodies (e.g., OECD, PEFA and the Task Force on Finance Statistics) enhanced the applicability of the tool.

²² These included participants at the First Annual Organisation for Economic Co-operation and Development (OECD) Forum on African Public Debt Management, Amsterdam, December 2006; the Fifth Inter-Regional Debt Managers Seminar, London, September 2007; UNCTAD's Sixth Debt Management Conference, Geneva, November 2007; the Inter-Agency Task Force on Finance Statistics, March 2007; and the IMF, October 2007. Based on the past year's operational application and suggestions received at training/outreach events from inter alia, Crown Agents, MEFMI, WAIFEM, Pole Dette, CEMLA, ADB, and AfDB, were considered in the latest amendment the DeMPA indicators in November 2008 in line with the DeMPA Amendments Policy (http://go.worldbank.org/5AHEF2KF70).

²³ The tool is attached in an accompanying volume, and is complemented by a Guide that provides supplemental rationale and information on each indicator to assist users (http://go.worldbank.org/5AHEF2KF70).

Box 3. Debt Management Performance Assessment Indicators (DPIs)						
	Governance and Strategy Development					
DPI-1	Legal Framework					
DPI-2	Managerial Structure					
DPI-3	Debt Management Strategy					
DPI-4	Evaluation of Debt Management Operations					
DPI-5	Audit					
	Coordination with Macroeconomic Policies					
DPI-6	Coordination with Fiscal Policy					
DPI-7	Coordination with Monetary Policy					
	Borrowing and Related Financing Activities					
DPI-8	Domestic Borrowing					
DPI-9	External Borrowing					
DPI-10	Loan Guarantees, On-lending and Derivatives					
	Cash Flow Forecasting and Cash Balance Management					
DPI-11	Cash Flow Forecasting and Cash Balance Management					
	Operational Risk Management					
DPI-12	Debt Administration and Data Security					
DPI-13	Segregation of Duties, Staff Capacity and Business Continuity					
	Debt Records and Reporting					
DPI-14	Debt Records					
DPI-15	Debt Reporting					

34. **DeMPA provides a detailed assessment across these 15 indicators.** PDM operations are scored across a number of different dimensions under each indicator, adopting a scoring methodology similar to PEFA. This will allow country authorities to monitor improvements over time and benchmark their performance relative to other countries. An important difference relative to PEFA is the emphasis placed on meeting a minimum requirement that is considered a necessary condition for effective performance, i.e., achieving a C score for a specific dimension. Failure to meet that minimum requirement signals a serious deficiency in performance, indicating a priority area for reform. The dimensions of each indicator provide a level of detail that can form the basis for the design of an actionable reform plan.

35. A key value of the assessment is the qualitative description that justifies each score. This is captured in the assessment report. By highlighting, in detail, the specific strengths and weaknesses, the report enables the development of a prioritized PDM reform

plan. However, the report stops short of making recommendations for reforms or setting out an action plan as these activities require careful follow-up.

36. The assessment is discussed with the country authorities, but is not a negotiated document. Where the authorities' views differ from that of the assessment, the divergence of views is reflected in the report. It is a document owned by the authorities, to be used to help improve PDM operations as they determine. In this connection, it is at the country's discretion whether or not to disclose the assessment report.

B. Preliminary Results from Early Application

37. **After piloting the DeMPA indicators in 5 countries, 18 country assessments have been undertaken to date.** As the product is demand driven, there is no pre-defined target list of countries. However, assessments have been completed in a diverse set of countries, including those at differing stages of the HIPC process (Table 1). It has also been undertaken in MICs. This experience shows that, while the DeMPA indicators were designed for LICs, they are an equally useful diagnostic for the MIC context. In several instances, the assessments were carried out in partnership with regional TA providers. This collaboration is likely to increase significantly going forward.

Table 1. DeMPA Assessments and Country Characteristics

Country	2007 GNI Per Capita (Atlas Method, current US\$)	HIPC Status	Country	2007 GNI Per Capita (Atlas Method, current US\$)	HIPC Status
Africa (16)			East Asia & Pacific (1)		
Burkına Faso** Cameroon**	\$430 \$1,050	Post-CP Post-CP	Mongolia	\$1,290	NA
CAR Gambia*	\$380 \$320	Interim Period Post-CP	Europe and Central Asia (2)		
Ghana	\$520 \$590	Post-CP	Albania*	\$3,290	NA
Guinea**	\$400	Interim Period	Moldova	\$1,260	NA
Malawi* Mali** Mozambique	\$250 \$500 \$320	Post-CP Post-CP Post-CP	Latin America & Caribbean (3)		
Nigeria**	\$930	NA	Guyana*	\$1,300	Post-CP
Republic of Congo**	\$1,540	Interim Period	Honduras**	\$1,600	Post-CP
Rwanda**	\$320	Post-CP	Nicaragua*	\$980	Post-CP
Sao Tome and Principe	\$870	Post-CP			
Swaziland**	\$2,580	NA	South Asia (1)		
Togo	\$360	Interim Period			
Zambia	\$800	Post-CP	Bangladesh	\$470	NA

Source: World Bank WDI Database and DeMPA assessment reports.

Notes: * Pilot countries. ** Joint missions with other debt management technical assistance providers. NA = Not Applicable.

38. Early results from DeMPA assessment reports are helping to identify common priority areas for debt management reform across countries. Across the six core functions, operational risk management, and cash flow forecasting and management, appeared as key weak spots (Figure 2, panel 1). Less than half of the sample complied with minimum requirements for sound governance and strategy development. Countries appeared to do better in the areas of coordination with macroeconomic policies and the recording and

reporting of public debt data, while roughly half scored a C or higher with respect to borrowing and related financing activities.²⁴

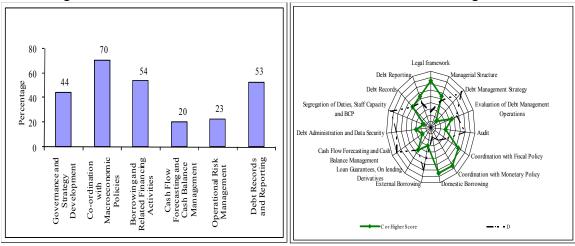


Figure 2. The DeMPA Tool: Core Functions and Debt Management

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Note: Data in the charts relates to twenty countries for which the reports have been finalized.

39. A closer look at the 15 individual indicators and their associated dimensions provides a better understanding of the broad characteristics (Figure 3, panel 2). For example, underlying the weak operational risk management results is the absence in the majority of countries of (i) business continuity planning; (ii) strong operational controls; and (iii) well-articulated responsibilities for staff. The poor performance under the sound governance and debt management strategy development function can be explained by the fact that very few LICs in the sample have debt management strategies that could be implemented, coupled with ineffective accountability frameworks, evidenced by the lack of regular performance audits. These weaknesses outweigh the positive fact that the majority of countries have effective legal frameworks that underpin borrowing. In the area of cash flow forecasting and cash balance management, performance is impeded by weak forecasting of the aggregate cash balances in government bank accounts (see Appendix III).

40. Of particular concern is the weakness observed in the area of external borrowing. Less than one-third of the countries in the sample met minimum requirements in

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²⁴ The dimensions under the indicator "coordination with macroeconomic policies" reveal a sample bias that is likely to unwind with future assessments. A number of the countries in the current sample are part of either the Economic and Monetary Community of Central Africa or the West African Economic and Monetary Union; as such the governments are bound by strict legislation that limits the availability of direct resources from the regional central banks. Going forward we expect fewer countries in the sample to be part of currency unions with such legislation. Similarly, we expect that the ratings for the "coordination with fiscal policy" will fall due to an amendment to this indicator. Staff has strengthened the minimum requirement from simply having access to key fiscal variables to having undertaken a DSA within the last three years.

this area. Scores on the three dimensions of this indicator show that there is (i) a low degree of assessment of the most beneficial/cost-effective borrowing terms and conditions; and (ii) a general absence of documented procedures for borrowing in foreign markets. These findings are particularly worrying because a number of the countries in the sample have expressed their interest in issuing in international capital markets once the financial turbulence settles.

41. The results also show that very few LICs have sound debt management strategies. In line with the experience in the MTDS pilots, while every country in the sample had a strategy, it was generally unpublished, did not have approval of the highest policy makers and was not supported by a decision making process that would ensure its regular production and updating. Moreover, most strategies were not underpinned by sound cost-risk analytics.

VI. OVERALL LESSONS

- 42. Country authorities and TA partners have expressed support for the Fund and Bank's emphasis on supporting PDM reform efforts. They considered each toolkit valuable on its own merits, although they did consistently request additional explanation on how the various toolkits in this area, namely, DSF, MTDS, and DeMPA, are interrelated. In this connection, they encouraged staff to provide more training on the toolkits going forward. In addition, they strongly supported the public good nature of the toolkits, but noted that other providers of TA would need to be trained so that they could also support this reform effort.
- 43. **As the AT has been developed, efforts have been made to make it more user friendly.** This has been done in part by providing a user manual and reducing some complexity. Still, while welcoming the usefulness of the tool, many users have continued to comment on its complexity. Going forward, staff intend to make improvements in this area.²⁵
- 44. Support for the usefulness of the toolkits was echoed by other providers of debt management TA. TA partners have indicated their willingness to adopt both the DeMPA and the MTDS frameworks in their own work programs. Regional partners, such as MEFMI, have already made provision for training on the frameworks to be incorporated in their work programs for the coming year. Both UNCTAD and COMSEC have indicated their intention to develop standard reports that will generate some of the required data input for the MTDS analysis.
- 45. The MTDS toolkit has proved useful in providing a coherent framework and the required analytical underpinnings for debt management strategy formulation. It has proved to be flexible in its application, being able to deal with the unique debt structures, and

²⁵ As with the DSF templates, the AT, and its accompanying user manual, will be revised further in light of ongoing country experience.

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to partially adjust for various indirect costs or constraints.²⁶ The toolkit has been effective in underscoring the importance of a coordinated process for formulating a strategy, and helping to clearly and explicitly document the debt strategy trade-offs, which could enhance the accountability and transparency of country authorities' actions.

- 46. Staffs were able to demonstrate how the MTDS toolkit would enable countries take a total portfolio approach to determining their financing choices. Such an approach would allow country authorities to identify whether more elaborate debt strategies, which go beyond the sole consideration of concessional financing, would generate a profile of interest costs that would continue to be consistent with debt sustainability, given improved macroeconomic conditions, greater macroeconomic and PDM capacity, and a more diverse range of financing options.²⁷ For example, different combinations of concessional, quasiconcessional and market debt could be tested to determine a possible ceiling on, say, where average interest costs would still be consistent with debt sustainability. This approach would also eliminate a need to calculate the net present values of specific loans and their implied grant elements, so that an analysis of debt sustainability would be similar to that undertaken in more advanced countries. Facilitating the development and implementation of such strategies would also help enhance the effectiveness of medium-term expenditure and fiscal frameworks, enabling the authorities to set expenditure priorities independent of financing sources.
- 47. The MTDS toolkit also proved useful in estimating the costs of following an explicit domestic market development strategy. Although the broader benefits of a deeper domestic market could not be quantified, the AT could help quantify the costs of following a specific issuance plan, designed to promote the development of the debt market. This would allow authorities to more fully assess the potential risks to debt sustainability of developing the market by increasing domestic debt.
- 48. The DeMPA application was successful in sensitizing policy makers to the comprehensiveness of sound debt management practice. Often, there is an impression that debt management is primarily about debt data recording and reporting, and it is not considered a separate policy with its own objectives and targets. This, in part, explains why

²⁶ For example, where borrowing choices are constrained by existing, pre-committed loans. Another example is explicitly modeling the implications of an LIC issuing sovereign debt on international capital markets.

²⁷ Such strategies are envisaged under the proposed amendments to Fund policies discussed in "Changing Patterns of Low-Income Country Financing and Implications for Fund Policies on External Financing and Debt", March 2009. It could also help demonstrate that a specific proposal to use nonconcessional loans would be consistent with IDA's NonConcessional Borrowing Policy. See IDA (2006b). "IDA Countries and NonConcessional Debt: Dealing with the 'Free Rider' Problem in IDA14 Grant Recipient and Post-MDRI Countries," July.

some of the key analytical aspects of PDM operations²⁸ have been found to be weak or non-existent. The application of both toolkits also had the effect of emphasizing the risk that inconsistencies could emerge in the government's overall policy mix when PDM is not given a separate policy mandate underpinned by an effective MTDS.

- 49. **Country demand for MTDS and DeMPA follow-up is strong.** Although constrained so far by limited resources, staffs have undertaken follow-up activities in a variety of ways with those countries that have requested it. For instance, reform programs have been prepared in Albania, Ghana, and a preliminary sequencing done for Bangladesh. Specific follow-up MTDS missions are planned in Moldova and Ghana, while the resident debt management advisor at the Central AFRITAC is following up bilaterally some related issues in Cameroon. In Togo, DeMPA has been followed by a debt data recording and reporting systems upgrade, and related TA has been provided. Malawi's DeMPA assessment report was used in Bank country work for structuring lending operations, while Mozambique's was used to inform financial sector TA projects.
- 50. These activities will need to be complemented by efforts to strengthen capacity in other areas, such as public financial management, government cash management, and monetary operations. In addition, strengthening PDM is an integral part of a domestic debt market development program, ²⁹ which in turn will allow governments to reduce costs and better manage risks in the public debt portfolio over time. To be most effective, these activities will need appropriate sequencing and to be coordinated with the PDM reform plan.

VII. FURTHER STEPS TOWARDS IMPROVING PDM FRAMEWORKS

51. The lessons learned from the development and application of the MTDS and DeMPA highlight a continuing need to strengthen PDM frameworks. This need becomes more acute in light of the fact that more advanced LICs may increase their reliance on nonconcessional financing, given the scale of their investment needs and the potential reduction in access to concessional financing with increased income levels. Addressing that need will require a sustained capacity building and TA effort, including in collaboration with external partners and Regional Technical Assistance Centers (RTACs). This section highlights the steps planned by staffs to undertake this effort.

²⁹ That work requires close coordination of a wide range of stakeholders and covers a broad range of aspects from money, primary and secondary markets, the investor base, market infrastructure and regulation. See, for example, World Bank (2007) "Developing the Domestic Government Debt Market: From Diagnostics to Reform Implementation".

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²⁸ Areas like cost-benefit analysis of new borrowing, the design and implementation of an MTDS, cash flow forecasting and cash balance management, and the publication of a debt statistical bulletin.

³⁰ See the August 1, 2008 Nouakchott Declaration on Financing for Development in Africa.

A. Continuing the Program of Assessments and Capacity Building in LICs

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- 52. The development phase of the MTDS toolkit is complete and country application underway, DeMPA implementation is in an advanced stage, and targeted capacity building and TA activities are set to continue. Staffs propose to scale up all three activities going forward in partnership with external partners and RTACs.
- 53. Staffs aim to apply the MTDS framework in 4–6 new countries and undertake up to 20 DeMPA assessments per year. In addition, country work to develop reform programs and targeted TA on specific related topics will be undertaken. Efforts will be made to align these with the debt related work programs developed by the RTACs in order to avoid overlaps, ensure consistency, and availability of immediate technical support in PDM.³¹ However, in FY10, Fund delivery may be constrained by other work demands arising from the current crisis.
- 54. **Delivery of this work will remain driven by country demand; thereby ensuring ownership and securing a clear commitment to follow-up**. Staffs will work with country and regional teams as the key channels for identifying potential candidates for DeMPA and MTDS, and to help determine the priority of delivery. It is envisaged that the ideal sequence of activities would be DeMPA, followed by MTDS, followed by development of a reform program, followed by other tailored TA to implement the reform program. However, staffs recognize that country requests may not neatly fit into this mould. Thus, flexibility and coordination of delivery, including through the Bank-Fund Coordination Meeting on Debt Management and Debt Markets³² and through consultation with external partners and the RTACs, will be important. Staffs are in the process of putting in place a formal and rigorous review process to ensure that, as the program expands, the quality and consistency of work is maintained. This will be supported by embedding a formal feedback process with country authorities so that activities remain relevant. This country experience and feedback will enable staffs to keep these frameworks under review, and to update them as necessary.
- 55. Ensuring that this work program improves debt management outcomes will require ongoing monitoring, and coordination with other Bank-Fund work. PDM plays an important role in supporting and helping maintain macroeconomic stability, and supporting the development of domestic debt markets. Consequently, evaluating the effectiveness of PDM operations and monitoring implementation of reform plans could play a role in country work. For example, country teams should include a more specific discussion of the authorities' debt management strategy and whether it meets the standard set out in

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³¹ These work programs are coordinated with HQ activities.

³² This regular meeting, established early 2007, is an important mechanism to improve collaboration in the provision of TA and capacity building and advisory services, helping to address some of the concerns identified in the report of the external review committee on Bank–Fund collaboration, February 2007.

DeMPA and is in line with the approach set out in the MTDS framework. This could help identify candidates and priorities for capacity building activities, helping resource allocation decisions. Additionally, the regular (e.g., in intervals of approximately 3 years) application of the DeMPA tool in the same country can help monitor and evaluate debt management reform outcomes over time. This also helps to monitor the effective use of the resources that the Bank, the Fund and donors intend to use to support the work program (see sub-section below).

- Training activities will play an increasingly important role in the work program. The delivery of capacity building and TA activities will need to be supported by training of country officials, including in collaboration with external partners, and a number of training activities are already in the calendar. For example, the Bank has planned three events in collaboration with the Joint Vienna Institute, while the Fund is planning a workshop in collaboration with East AFRITAC, and more generally to integrate MTDS modules in its regular training and workshops with the IMF Institute. In addition, two DeMPA training events, one in collaboration with the East Caribbean Central Bank, are planned. Section 24.
- 57. These activities will be complemented by various outreach activities. For example, staffs are planning to arrange a roundtable to discuss with policy makers debt strategy related challenges facing LICs. Countries will continue to be invited to participate in regular fora, such as the Sovereign Debt Management Forum (see paragraph 69 below). These complement ongoing efforts by the Fund and Bank to disseminate and train country officials in debt sustainability analysis and debt statistics.
- Developing a "training of trainers" program will be important to ensure that the DeMPA and MTDS frameworks become established public goods. Staffs are planning to develop such a program for the MTDS framework. Experience with such a program for the DeMPA indicates that it is an effective way to help establish the toolkits as recognized standards for PDM capacity building and TA. Importantly, it has also facilitated the inclusion of partners in DeMPA missions, reducing the resource burden, and enhancing partners' engagement with the delivery of follow-up activities. Several partners have already indicated their appetite for participating and organizing such programs.³⁵

³³ The Bank has also created a database of providers of training in PDM, centralizing training information that can be useful for public debt managers, available at http://treasury.worldbank.org/Services/Public+Debt+Management/Resources/DatabaseofProvidersofTrainingonPDM.html.

³⁴ This follows three other trainings on the DeMPA: one training for trainers in collaboration with UNCTAD at Geneva, and two Regional trainings for client countries in collaboration with WAIFEM at Abuja and MEFMI at Nairobi.

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³⁵ For example, Commonwealth Secretariat has requested training for its staff on the framework, while MEFMI has scheduled a specific course for its fellows.

69. More generally, coordination with external partners and other multilateral development banks will be necessary to effectively scale up these capacity building activities. Their support will be needed to provide follow-up in their respective areas of expertise, including for example, support for country authorities in the area of debt recording so as to generate the necessary inputs into the MTDS AT. In addition, given the scale of follow-up activities needed, their participation will be needed to relieve the resource constraint. A detailed reform program, developed and adopted by country authorities, will help coordinate and maximize the synergies across all TA and capacity building providers.³⁶

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B. Resources for Implementation

- 60. To support these activities, the Bank has recently launched a multi-donor trust fund—Debt Management Facility (DMF) for Low-Income Countries (LICs). The Fund is represented on the DMF Technical Advisory Group (TAG). The DMF is a multi-donor trust fund—to date commitments are \$12 million over 4 years—established to support the scaling up and accelerated implementation of the Bank's debt management work program in LICs. The objective of the facility is to strengthen debt management capacity and institutions in developing countries through:
 - Systematic application of the DeMPA tool;
 - Application of the MTDS framework;
 - Design of debt management reform programs; and
 - Promotion of learning and knowledge generation via an extensive program of training and outreach, including a Debt Management Practitioners' Program.
- The funding of the DMF will leverage the Bank budget that has already been programmed for these capacity building activities. Additional Bank budget was provided for the debt management work program for three fiscal years beginning in FY08. The development and implementation of the DeMPA and the MTDS achieved to date has benefited from these funds. For the program of activities scheduled going forward, an extension for an additional three fiscal years would help ensure that these activities are mainstreamed into Bank country team operations.
- 62. **DMF funding allows Bank staff to engage in complementary activities to DeMPA and MTDS.** A key follow-up activity to the DeMPA assessments will be working with countries to develop a debt management reform plan to help strengthen the weaknesses identified. Knowledge management, training and research will also figure prominently in the DMF work program activities. Most DMF activities will be delivered in cooperation with a

³⁶ See Strengthening Debt Management Practices: Lessons from Country Experiences and Issues Going Forward, Annex IV for a description of the main debt management TA agencies.

number of "implementing partners" that will receive DMF grants. ³⁷ However, DMF is an open platform that allows for other partners to participate in the future. Effective coordination among the Bank, the Fund and the implementing partners will be supported by the TAG. The TAG will comprise non-Bank experts from each of the implementing partners.

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- 63. In order to complete the PDM architecture, the Fund is working to put in place a Topical Trust Fund (TTF) that will be complementary to the World Bank's DMF.³⁸ The Fund's TTF will provide assistance to help LICs formulate and implement sustainable debt strategies. The Fund's TTF will have two pillars: (i) an analytical pillar, anchored around the DSF and MTDS, which will help countries determine the level, terms and composition of borrowing that can be sustained over time; (ii) an infrastructural pillar, which will then provide technical assistance that will support the implementation of a country's preferred MTDS, i.e. put in place the necessary institutions and infrastructure to deepen domestic debt markets or facilitate access to international capital markets.
- 64. To ensure flexibility and comprehensiveness, TA delivery under the Fund TTF will take place through a set of modules designed to cover the entire spectrum of debt strategy issues, from formulation to implementation. The envisaged modules are expected to train country officials in DSF, provide assistance in formulating MTDS, strengthen fiscal and cash management linkages relating to debt management, provide analytical tools to better assess risks in public debt portfolios, develop and deepen domestic public debt markets, and advise on accessing international capital markets. While a frontier LIC, with reasonably effective debt management capacity and a debt strategy in place, may just need help to issue sovereign bonds in the international capital markets, a post-MDRI low-capacity country might need to focus on more basic modules to entrench the concept of debt sustainability. The proposed TTF will give priority to LICs that have benefited or are benefiting from the HIPC and MDRI initiatives to ensure a durable exit from their past debt distress. TA delivery will use a combination of country missions, regional workshops and dissemination events.³⁹

³⁷ The initial list of implementing partners is: the Commonwealth Secretariat, UNCTAD's DMFAS Programme, Debt Relief International, CEMLA, MEFMI, Pole-Dette and WAIFEM.

³⁸ This is one of the nine TTFs the Fund is seeking to establish in order to enhance capacity building in developing countries in the following areas: public finance management, revenue administration, management of natural resource wealth, compilation and dissemination of basic macroeconomic and financial statistics, monitoring of macroeconomic and financial vulnerabilities, financial sector stability, debt sustainability, antimoney laundering and combating financing of terrorism, and enabling macroeconomic environment in fragile states.

³⁹ MTDS missions require two steps: an initial two-week mission consisting of two Bank and two Fund staff, and a one-week follow-up mission by one Bank and one Fund staff. In addition, some training and dissemination events, (e.g., 2–3 regional events plus one HQ-based event per year) will also take place in order to sensitize policymakers and disseminate best practice. As LICs' awareness of debt sustainability and related (continued)

C. TA and Capacity Building Activities in MICs

- 65. **Staffs intend to continue with their existing activities in MICs (see Box 4).** ⁴⁰ This reflects the fact that these countries also require a re-evaluation of existing debt management strategies given the fundamental changes in the macroeconomic and market environment. These activities will continue to be demand driven, in line with country priorities; ⁴¹ it is also likely that these activities will be scaled up, particularly in more vulnerable countries as a consequence of the current financial crisis. Coordination with debt market development work programs will also be strengthened, in order to meet immediate TA needs in the wake of the crisis, but which would also contribute to long-term development goals. Fund and Bank staff will continue to collaborate with advanced countries and EMs so that they can share their experiences with other developing countries through the direct provision of TA and through participation in Bank or Fund missions.
- 66. **In addition, capacity building at the sub-national level is likely to increase in importance** as the process of public expenditure and investment decentralization deepens, increasing the need for sound risk management. ⁴² This will need to be complemented by continued work at the central government level to strengthen the management and oversight of contingent liabilities.
- 67. Given that the DeMPA and MTDS frameworks build on the approaches taken by more developed economies, it is likely that MICs woud also find them useful. Indeed the general characteristics of the MTDS framework have provided the basis for much of the ongoing PDM advisory and TA activities in MICs. More recently the MTDS framework has been used more explicitly as the basis for such work. In this context, the GN will prove useful to a broad range of client and member countries.
- 68. **These TA and capacity building activities will continue to be complemented by various training events.** Two flagship training courses "Designing Government Debt Management Strategies" and "Implementing Government Debt Management Strategies" are likely to continue to be offered by the Bank on an annual basis in Washington, Paris and Tokyo (in collaboration with the Government of Japan). These are often supplemented by technical *ad hoc* workshops, arranged by both the Bank and the Fund, such as the Bank-

issues improves over time, the frequency of these events is expected to decline. Country delivery of the planned DeMPA work program would involve one two-week mission with 3 Bank staff or experts.

⁴⁰ Lessons learned on TA and capacity building activities in MICs, discussed extensively in Strengthening Debt Management Practices: Lessons from Country Experiences and Issues Going Forward, continue to hold.

⁴¹ Consequently, the pace and focus of delivery of Fund activities may be affected by the new policy on TA charging.

⁴² The Bank has recently begun providing capacity building in this specific area.

⁴³ For the first time, the Fund will also be providing resource persons for this program in 2009.

organized workshop on risk modeling for debt managers from OECD and emerging and developing countries, or the Fund-organized workshop on contingent liabilities and debt management strategy formulation.

Box 4. Debt Management Related Country Work

Since the last Board discussion in May 2007, the Fund and Bank have been active in providing TA and advisory services across a wide range of countries.

World Bank Country Work

The Bank's advisory services provide support for countries across all stages of reform, from diagnostics to implementation. Since May 2007, diagnostics have been carried out in ten countries including Armenia, Belarus, Egypt, Honduras, Jamaica, Jordan, Nigeria, Panama, Peru and Swaziland. The Bank assisted five countries including Albania, Armenia, Egypt, El Salvador, and Panama in designing reform plans. Implementation of reforms has been supported in Armenia, Chile, Colombia, Costa Rica, Dominican Republic, Egypt, El Salvador, Guatemala, Kenya, Indonesia (in partnership with the Fund), Jordan (also in partnership with the Fund), Macedonia, Mongolia, Pakistan, Panama, Peru, Serbia, and United Arab Emirates. One of the new activities has been to provide support to sub-national government, where a needs assessment was carried out in Andhra Pradesh (India) and a diagnostic of risk management practices in Rio Grande do Sul (Brazil). Debt management reform is usually integrated in Bank operational work, including that related to the financial sector, public financial management, and governance.

IMF Country Work

Since May 2007, the Fund has delivered about 40 TA missions in debt management or debt market development from headquarters, including the joint Bank-Fund missions to Indonesia and Jordan, and four missions applying the CCA framework to evaluate sovereign risk. In addition, resident debt management advisers based at Central and West AFRITAC and in the Central Asian region have delivered around an additional 45 missions. Some of these have been delivered within the context of a regional project, generally undertaken in partnership with regional authorities, to strengthen debt management systems and develop debt markets. These include projects underway in Central America (supported by the CMAC) and the CEMAC region (in collaboration with the BEAC), plus a project just initiated in the MCD region, in partnership with the AMF. Debt management issues have also been central to a number of UFR-related surveillance missions, such as Seychelles and Ukraine. Debt management and debt market development issues have also been covered in detail in the context of Article IV surveillance in 9 countries, including for example Brazil.

Joint Country Work

In the particular context of the joint FSAP program, debt management and debt market development issues have been dealt with in detail in 17 FSAPs and FSAP updates completed since May 2007, including Syria and Thailand.

69. **Other regular outreach events will continue.** For example, the IMF's Public Debt Management Forum and the World Bank Sovereign Debt Management Forum will continue

to provide valuable opportunities for debt managers to share experiences and network. ⁴⁴ These events also contribute to, and enhance the quality of, Fund multilateral surveillance. In the area of debt market development, both the Fund and Bank partner with the OECD in the annual OECD-World Bank-IMF Global Bond Forum. Similarly, the Bank will continue to support events such as the International Retail Debt Management Symposium, in collaboration with a group of OECD country retail debt managers, to benefit emerging and developing country debt managers interested in developing a retail debt market.

70. **Finally, both the Fund and Bank will continue to produce applied research and analysis**. For example, Bank staff is currently working on a publication that synthesizes the Bank training program mentioned above, and on a Policy Research Paper on "On-Lending of Borrowed Funds: Issues, Country Practices, and Lessons for Emerging Market Governments", 45 while Fund staff is currently working on a number of policy papers related to the impact of the crisis and associated public interventions, on debt, its management, and debt markets, along with a working paper on "The Cost of Aggressive Sovereign Debt Policies: How Much is the Private Sector Affected?". 46 In addition, the Fund's Global and Financial Stability Report regularly addresses developments in PDM and debt markets in the context of its overall risk analysis. 47

VIII. ISSUES FOR DISCUSSION

- Do Boards agree that the ongoing crisis further confirms the urgency for the provision of debt management TA and capacity building in developing countries, especially LICs?
- Do Boards endorse the proposed work program of activities? Specifically;
 - Do Boards endorse the MTDS toolkit, comprising the GN and AT, and its application in more countries, including MICs?

⁴⁴ These will be complemented by the initiation of a Forum for Asian debt managers, which will be supported by the Asian Development Fund and Bank.

⁴⁵ Complementing the three research papers published since May 2007 on "A cross-country analysis of public debt management strategies"; "Choosing the currency structure for sovereign debt: a review of current approaches"; "Coordinating Public Debt Management with Fiscal and Monetary Policies: An Analytical Framework".

⁴⁶ The Fund has also recently published a number of debt related working papers, including "Strategic Considerations for First Time Sovereign Bond Issuers", "A Risk-Based Debt Sustainability Framework: Incorporating Balance Sheets and Uncertainty", "A Framework for Developing Secondary Markets for Government Securities", "Measuring Sovereign Risk in Turkey: An Application of the Contingent Claims Approach".

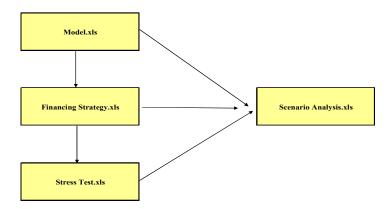
⁴⁷ For example an assessment of the impact of the transfer of banking sector risk to the sovereign will be presented in the forthcoming GFSR.

- Do Boards support the ongoing use of the DeMPA framework for assessing strengths and weaknesses in PDM operations?
- Do Boards agree that countries should continue with, and prioritize, efforts to strengthen their PDM frameworks, including by formulating robust debt strategies based on the MTDS framework, and developing and implementing reform plans based on a DeMPA?
- Are there any areas where additional or supplementary guidance should be developed for country authorities?
- Do Boards agree that the suggested partnership with external partners and the RTACs provides an effective mechanism to deliver the work program?
- Should greater efforts be made in Fund and Bank country work to support the design and implementation of countries' MTDS, a diagnostic of PDM operations using DeMPA and/or follow-up of PDM reform programs, where relevant?

Appendix I. The MTDS Analytical Tool: An Overview

- 71. The purpose of the MTDS Analytical Tool (MTDS AT) is to support the process of decision-making by illustrating the consequences of following a particular financing strategy under various scenarios or stress tests. As with any tool, the outputs are driven by the assumptions made, so careful judgment must be applied when interpreting the results and taking the final decision on the appropriate choice of debt management strategy.
- 72. The AT allows the debt manager (DM) to simulate the impact of meeting their financing requirement using a variety a strategies. Strategies can be specified by either specifying a financing plan to be followed over the course of the simulation horizon or by specifying a desired debt portfolio composition to be achieved. The evolution of key cost and risk indicators for each strategy are assessed.
- 73. The AT has an excel-based structure (Figure 3) developed on the basis of scenario-analysis models typically used by debt management offices. It projects cash flows as a function of three main variables: (i) market scenarios (financial variables); (ii) borrowing strategies (e.g., combination of instruments); and (iii) macroeconomic assumptions (e.g., primary balances). Summary statistics are then computed based on complete cash flows and multi-currency instruments.
- 74. It is comprised of four separate spreadsheets (see Figure 3 below), three of which are used to (i) specify the model; (ii) various financing strategies; and (iii) shock scenarios. The fourth spreadsheet combines the information detailed in the other three spreadsheets, and runs the various financing strategies defined under alternative shock scenarios.
- 75. The key inputs for the AT consist of (i) the macro-economic framework, including the assumed path of the exchange rate—this is taken from the DSF; and (ii) details of the existing debt portfolio. Key assumptions include the (i) specification of the yield curves that will apply in both domestic and international markets for each period of the simulation; (ii) the pricing of other nonmarket instruments; and (iii) the strategies to be tested.
- 76. The model produces as output a number of cost and risk indicators for each strategy considered. These include the evolution of debt and debt service, indicators of repayment capacity, refinancing and interest rate risk, the debt composition (by instrument type and currency), and debt sustainability. Detailed amortization profiles are also produced for each point in time. The key output sheet is the Cost-Risk worksheet which compares key indicators across all the strategies to enable the trade-off to be evaluated.

Figure 3. Schematic of the MTDS Analytical Tool



Appendix II. Developing a Medium-Term Debt Management Strategy in Practice: An Illustration

- The objective of an MTDS mission is to provide TA to authorities to support their efforts to either develop or improve upon an existing debt management strategy. The GN provides a framework to focus the TA, and the AT can help add quantitative rigor to support the analysis of various strategy options. The elements of the toolkit are demonstrated to the authorities by assessing how a set of specific strategies might perform under a given set of pricing and macroeconomic assumptions—typically those used in the last DSA. However, the missions are not intended to produce an actual strategy. Indeed, even the various strategy options that are considered are not to be taken as staff suggestions or as a prescriptive list. The intention is that the authorities use the knowledge transfer to subsequently formulate a new, or modify an existing, MTDS, which could then be discussed with Fund and Bank country teams in the context of the overall discussion of the macroeconomic framework.
- 78. The aim of this Appendix is to provide an illustrative example of how the MTDS toolkit can work in practice. The country example below is based an actual country case where the toolkit has already been applied.

Country background

79. **Prior to the HIPC/MDRI debt relief, this country's implicit debt management strategy was cost reduction.** Recently a national public debt management strategy document was published that charted a new course for developing the domestic debt market, and sought to institutionalize a closer consideration of the cost and risk trade-offs of new borrowing options going forward, while maintaining long-term debt sustainability. The MTDS exercise was to help provide a framework to quantitatively evaluate these options, by providing the cost and risk trade-offs involved in alternative debt management strategies.

Costs and risks of the existing debt portfolio

80. The existing debt portfolio is broadly composed of 60 percent external and 40 percent domestic debt. Overall the portfolio is relatively low cost. Almost all external debt is contracted at concessional rates, while the presence of captive investors, and practice of forced placements, has kept the cost of domestic debt below a true market rate. With regard to key vulnerabilities, foreign exchange risk is the dominant risk as there is no domestic currency debt—all debt is denominated in or linked to foreign currencies. Refinancing and interest rate risk are moderate as only 6 percent of the total debt matures in the next 5 years, and over 80 percent of the total portfolio is fixed rate.

Structural features and macroeconomic risks

81. Despite substantial debt relief and recent fiscal consolidation, the country remains at a modest risk of debt distress, underlining the importance of continuing to contain debt interest costs. A key factor affecting the risk of debt distress is the country's vulnerability to exchange rate movements, particularly given its dependence on commodity exports and high oil imports. Given persistently high current account deficits, and the limited availability of concessional loans and volatility of aid, the authorities have sometimes felt the need to rely on domestic issuance or external borrowing from nontraditional sources to meet expenditure needs. Weather related events regularly impact the fiscal and balance of payments position, again potentially resulting in unanticipated financing needs. However, the domestic financial market is highly dollarized and shallow with limited institutional investors, limiting its ability to smooth the impact of these temporary budgetary shocks. In addition, the impact of rising food and fuel prices poses an additional challenge with respect to containing domestic financing costs, and pressure on the real exchange rate.

Assessing the alternative debt management strategies

- 82. Taking these factors into account, the relative performance of four alternative debt management strategies was considered (see Figure 4). The strategies tested were based on discussion with the authorities with respect to their goal of developing the domestic debt market and their perspective on their options for securing concessional financing going forward:
- (S1) The existing strategy where financing needs are mostly covered with external concessional debt, implying a continued reduction in the domestic debt stock;
- (S2) Strategy aimed at developing the domestic debt market, by rolling over some maturing domestic debt into new, more standardized, domestic debt instruments and implying lower external debt relative to S1;
- (S3) Strategy that addresses the exchange rate risk by introducing domestic currency denominated debt at the same pace as domestic debt is issued under S2; and
- (S4) Strategy to change the composition of external debt by reducing the degree of concessionality of external financing, reflecting the authorities' concern that the availability of concessional financing may decline going forward.

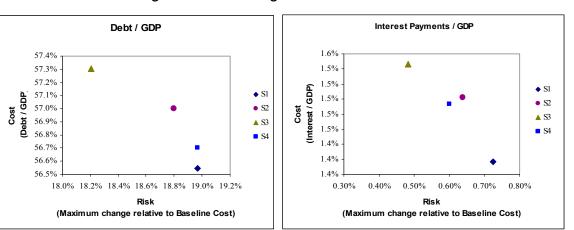


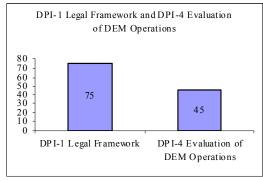
Figure 4. Illustrating the Cost-Risk Trade-off

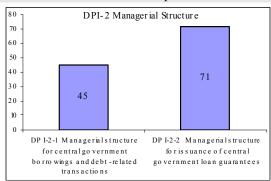
83. For a similar level of risk, strategy 1 is the least costly compared to strategies 2 and 4. This strategy implicitly maximizes concessional borrowing to help maintain debt sustainability. Strategies 2 and 3 are illustrative scenarios that highlight the potential increase in costs associated with the authorities' stated objective of building the domestic debt market. Similarly, these strategies capture the impact of using domestic sources of financing in the event that the total amount of concessional funding is not forthcoming and external nonconcessional sources are limited. In addition, Strategy 3 highlights the potential cost of reducing exchange rate exposure in the portfolio. The primary benefit of presenting the cost and risk of each strategy in this context is to highlight the estimated cost to the government budget of pursuing a domestic debt market development strategy. In order to contain these costs, and to ensure that risks of debt distress are not excessively aggravated, this market development strategy would need to be supported by prudent macro policies that would help reduce the cost—by reducing credit and inflation risk premia, while creating sufficient

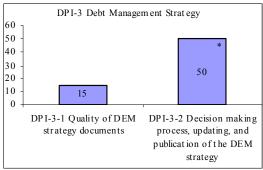
budget space to accommodate these costs.

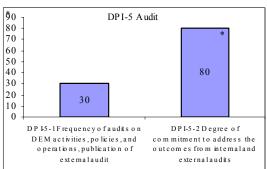
Appendix III. The DeMPA Tool: Preliminary Results

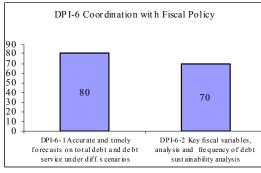
DeMPA Results by 35 Dimensions Percentage of Countries Meeting the Minimum Effectiveness Requirements

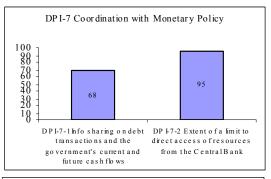


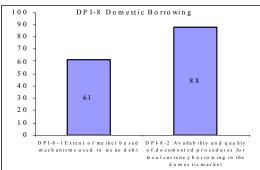


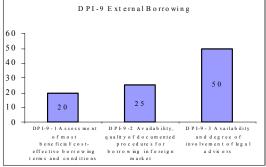




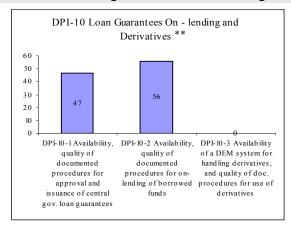


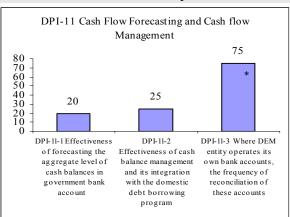


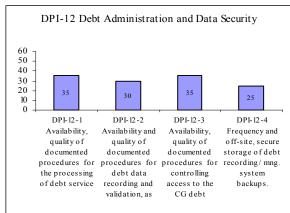


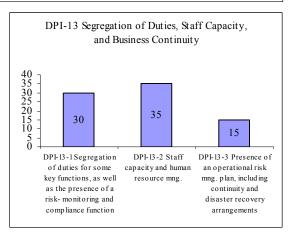


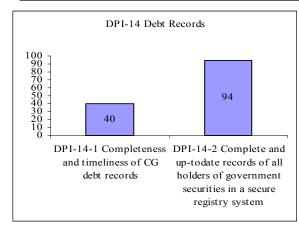
DeMPA Results by 35 Dimensions (Continued) Percentage of Countries Meeting the Minimum Effectiveness Requirements

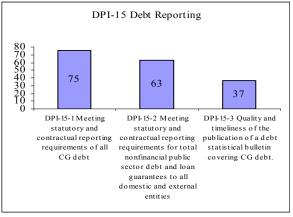












^{*} When calculating the percentage of those sampled countries which met with the minimum effectiveness requirements for a particular dimension, those countries, which received N/R (Not Rated) are excluded from the sample. In some cases, this inflates the result for a certain dimension, e.g. for the second dimension of the DPI-5 Audit, only ten countries out of twenty sampled countries were assigned a score; 80% or eight out of ten countries met with the minimum effectiveness requirements for this dimension. Other similar cases are marked with asterisk.

^{**} Assessment result indicates that none of the sampled countries had derivatives, see DPI-10-3.